

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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APPLICANT : ART KINZOKU KOGYO KK;

INVENTOR : MIYAKE NORIAKI;

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TITLE : COMBINATION OF MEMBER

ABSTRACT : PURPOSE: To improve the wear resistance of the sliding surfaces of the combination of 2 members which contact with each other and slide relatively by forming one member with a specified composite material and the other member with a metal plated with hard Cr.

CONSTITUTION: In the combination of a piston and a piston ring for an engine, at least the sliding surface part of the piston facing to the piston ring is formed with a composite material composed of alumina-silica fibers consisting of 40~ 65wt% alumina and the balance silica as a reinforcing material and Al, Mg or an alloy thereof as a matrix. At least the sliding surface part of the piston ring facing to the piston is formed with cast iron or other metal plated with hard Cr. Thus, the extent of wear of both the members can be minimized.

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